

FORM HDP-199 (Base) on Form PTO-1449)

PATENT AND TRADEMARK OFFICE INFORMATION DISCLOSURE CITATION

(Use several sheets if necessary)

Sheet 1 of 6

ATTORNEY DOCKET NO.	SERIAL NO.
1736-000001/REB	10/643,674
APPLICANT	
Hyon et al.	
FILING DATE	. GROUP
August 19, 2003	1711

U.S. P	ATENT DO	CUMENTS				
Ref. Desig.	Examiner's Initials	Document Number	Date	Name	Class/ Subclass	(If appropriate) Filing Date
1.	f13	3,886,056* 🗸	05/27/1975	Kitamaru et al.		
2.	1	4,224,696* /	09/30/1980	Murray et al.		
3.		4,587,163* √	05/6/1986	Zachariades		
4.		4,636,340*	01/13/1987	Itaba et al.		
5.		4,655,769* √	4/7/1987	Zachariades		
6.		4,747,990* ✓	5/31/1988	Gaussens et al.	1	
7.		5,030,402*	7/9/1991	Zachariades		
8.		5,030,487*	7/9/1991	Rosenzweig		
9.		5,066,755*	11/19/1991	Lemstra		
10.		5,130,376*	7/14/1992	Shih		
11.		5,276,079*	1/4/1994	Duan et al.		
12.		5,358,529*	10/25/1994	Davidson		
13.		5,405,393*	4/11/1995	Falkenstrom		
14.		5,428,079*	6/27/1995	Bastiaansen et al.		
15.		5,728,748*	3/17/1998	Sun et al.	1	
16.		2,948,666	8/9/1960	Lawton		
17.		3,362,897 /	1/9/1968	Lawton		
18.		3,956,253	5/11/1976	Braun		
19.		4,055,862	11/1/1977	Farling		
20.		4,171,338	10/16/1979	Mason		
21.	A	4,281,420	8/4/1981	Raab		

Examiner:	Auson	Berna	Date Considered:	12-28-04



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ATTORNEY DOCKET NO.	SERIAL NO.
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Ref. Desig.	Examiner's Initials	Document Number	Date	Name	Class/ Subclass	(If appropriate) Filing Date
22.	AB	4,582,656	4/15/1986	Hoffman		
23.		5,200,439	4/6/1993	Asanuma		
24.		5,210,130	5/11/1993	Howard, Jr.		
25.		5,414,049	5/9/1995	Sun et al.		
26.		5,439,949	8/8/1995	Lucas et al.		
27.		5,449,745	9/12/1995	Sun et al.		
28.		5,505,900	4/9/1996	Suwanda et al.		
29.		5,543,471	8/6/1996	Sun et al.		
30.		5,552,104	9/3/1996	DeNicola, Jr. et al.		
31.		5,577,368	11/26/1996	Hamilton et al.		
32.		5,650,485	7/22/1997	Sun et al.)	
33.		5,879,400	3/9/1999	Merrill et al.		
34.		6,017,975	1/25/2000	Saum et al.	17	
35.		6,165,220	12/26/2000	McKellop et al.		
36.		6,174,934	1/16/2001	Sun et al.		
37.		6,184,265 B1	2/6/2001	Hamilton et al.		
38.		6,228,900 B1	5/8/2001	Shen et al.		
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40.		6,365,089 B1	4/2/2002	Krebs et al.		
41.	pro	6,458,727 B1	10/1/2002	Jones et al.		

Examiner:	Lusan	Berman	Date Considered: 12-28-04	



FORM HDP-14-918 (Blocd on Form PTO-1449)

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Ref. Desig.	Examiner's Initials	Document Number	Date	Name	Class/ Subclass	(If appropriate) Filing Date
42.	SB	2002/0125614 A1	09/12/02	King et al.		
43.		2002/0037944 A1	03/28/02	Shen et al.		
44.		2003/0119935 A1	06/26/03	Merrill et al.		
45.		6,494,917 B1	12/17/02	McKellop et al.	7	
46.		6,355,215 B1	03/12/02	Poggie et al.		
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52.		6,048,480	04/11/00	Doyle		•
53.	AB	6,146,426	11/14/00	Doyle		

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Ref. Desig.	Examiner's Initials	Document Number	Date	Country		Class/ Subclass	Translation Yes	No
1.	AB	JP 57-211347	12/25/1982	Japan		<u></u>	х	
2.		JP 91 22222	5/13/1997	Japan			Abstract	
3.		WO 95/06148*	3/2/1995	PCT				
4.		WO 98/01085	1/15/1998	PCT				
5.	As	JP 62 243634	10/24/1987	Japan			Abstract	

Examiner:	Susan	Berman	Date Considered:	12-28-04	
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FORM HDP-1449 (Bases on Form PTO-1449)

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ATTORNEY DOCKET NO.	SERIAL NO.
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FORE	IGN PATEN	IT DOCUMENTS					
Ref. Desig.	Examiner's Initials	Document Number	Date	Country	Class/ Subclass	Translation Yes	No
6.	As	JP 4-198201	7/17/1992	Japan		Abstract	
7.		EP 0 729 981 A1	9/4/1996	Europe			
8.		JP 5-507748	11/4/1993	Japan		Abstract	
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1.	B	Choudhury et al., "The effects of irradiation and ageing on the abrasive wear resistance of ultra high molecular weight polyethylene," Wear 203-204 (1997), pp. 335-340.
2.		International Search Report, PCT/US97/11947 - included in WO 98/01085.
3.		Kang et al., "The Radiation Chemistry of Polyethylene. IX. Temperature Coefficient of Cross-Linking and Other Effects," Journal of the American Chemical Society, Vol. 89:9, April 26, 1967, pp. 1980-1986.
4.		Kitamura, R. et al., "The Properties of Transparent Film Made from Linear Polyethylene By Irradiation Cross-Linking," Macromolecules, vol. 6, 1973, pp. 337-343.*
5.		Kitamura, R. et al., Structure and Properties of Lightly Crosslinked Crystalline Polymers Crystallized or Processed under Molecular Orientation, Journal of Polymer Science: Macromolecular Reviews, vol. 14, 1979, pp. 207-264.*
6.		Kitamuru, R. et al., "Size and Orientation of Cristallites in Lightly Cross-linked Polyethylene, Crystallized from the Melt Under Unaxial Compression," DieMakromoekulare Chemie, vol. 175, 1974, pp. 255-275.*
7.	pp	O'Neill et al., "The distribution of oxidation products in irradiated ultra-high molecular weight polyethylene," Polymer Degradation and Stability (Feb. 1995), pp. 239-244.

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Examiner:	1	0-	Data Canaidaradi	. 0 81/
	Susan	Berna	Date Considered:	12-28-09
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FORM HDP-1449 (Baselin PTO-1449)

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ATTORNEY DOCKET No.	SERIAL NO.		
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9.		Oonishi et al., "The optimum dose of gamma radiation-heavy doses to low wear polyethylene in total hip prostheses," Journal of Materials Science: Materials in Medicine 8 (1997), pp. 11-18.
10.		Polymer Society, Polymer Functional Material Series-Medical Treatment Functional Material, Vol. 9, November 20, 1990, pp. 165-166.
11.		Polymer Society, Polymer New Material One Point-Medical Polymer Material, Vol. 20, February 20, 1989, pp. 45-46.
12.		Premnath, "Gamma sterilization of UHMWPE articular implants: an analysis of the oxidation problem," Biomaterials, Vol. 17 No. 18 (1996), pp. 1741-1753.
13.		Sun et al., "Development of an Accelerated Aging Method For Evaluation of Long-term Irradiation Effects on UHMWPE Implants," (1996), Howmedia Inc., Pfizer Hospital Products Group, pp. 969-970.
14.		Supplementary European Search Report, EP 95931434, December 28, 1998 - corresponds to EP 0729981.
15.		The American Academy of Orthopaedic Surgeons, "Polyethylene: The Past, Present and Future," 1999 Annual Meeting - Scientific Program, February 5, 1999, www.aaos.org/wordhtml/anmett99/sciprog/g.htm (20 pages).
16.		The American Academy of Orthopaedic Surgeons, "Researchers get awards for orthopaedic research," News Release, March 19, 1998, www.aaos.org/wordhtml/press/98press/kappa.htm (4 pages).
17.		The American Academy of Orthopaedic Surgeons, "Researchers to get Kappa Delta awards for achievements," Academy News, March 19, 1998, www.aaos.org/wordhtml/98news/kappa.htm (3 pages).
18.	AB	Tribology Laboratory information sheet and curriculum vitaes for Drs. McKellop and Shen, www.orthohospital.org/research/Tribology Lab (5 pages).

Examiner:	Susan	Burno	Date Considered:	12-28-04
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19.	M	Wilson et al., "Proton Modification of Ultra High Molecular Weight Polyethylene to Promote Crosslinking for Enhanced Chemical and Physical Properties," Materials Research Society Symposium Proceedings, Vol. 396 (1996), pp. 311-316.	

^{*} Indicates previously cited in original U.S. Patent 6,168,626.

Examiner:

Date Considered: 12-28-04

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PATENT AND TRADEMARK OFFICE INFORMATION DISCLOSURE CITATION

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Sheet 1 of 1

ATTORNEY DOCKET No.	SERIAL NO.
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Hyon et al.	,
FILING DATE	GROUP
May 8, 2002	3738 17//

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3_		-2003/0119935 A1	06/26/03	Merrill et al.	M	
4		-6;494;917-B1	12/17/02	McKellop-et al.	11/1	
5.		6,355,215 B1	03/12/02	Poggie et al.	XV E	
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<u>9</u> .		2003/0130743 A1	07/10/03	Scott et al.	ER	曾行
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-11.		6,048,480	04/11/00	Doyle		
12.		6,146,426	11/14/00	Doyle		

FOREIGN PATENT DOCUMENTS							
Ref. Desig.	Examiner's Initials	Document Number	Date	Country	Class/ Subclass	Translation Yes) No
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OTHER DOCUMENTS (including Author, Title, Date, Pertinent Pages, etc.)					
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Examiner:	Lucan	Berman	Date Considered:	12-2004